# California Board of Registered Nursing

## 2009-2010 Annual School Report

Data Summary and Historical Trend Analysis

A Presentation of Pre-Licensure Nursing Education Programs in California

## **Central Coast**

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#### **INTRODUCTION**

Each year, the California Board of Registered Nursing (BRN) requires all pre-licensure registered nursing programs in California to complete a survey detailing statistics of their programs, students and faculty. The survey collects data from August 1 through July 31. Information gathered from these surveys is compiled into a database and used to analyze trends in nursing education.

The BRN commissioned the University of California, San Francisco (UCSF) to conduct a historical analysis of data collected from the 2000-2001 survey through the 2009-2010 survey. In this report, we present ten years of historical data from the BRN Annual School Survey. Data analyses were conducted statewide and for nine economic regions<sup>1</sup> in California, with a separate report for each region. All reports are available on the BRN website (<a href="http://www.rn.ca.gov/">http://www.rn.ca.gov/</a>).

This report presents data from the 4-county Central Coast. Counties in the region include Monterey, San Benito, San Luis Obispo, and Santa Barbara. All data are presented in aggregate form and describe overall trends in the areas and over the times specified and, therefore, may not be applicable to individual nursing education programs. Additional data from the past ten years of the BRN Annual School Survey are available in an interactive database on the BRN website.

Data collected for the first time from the 2009-2010 survey are identified by the symbol (‡). The reliability of these new data will be reviewed and considered for continued inclusion in future surveys.

<sup>&</sup>lt;sup>1</sup> The nine regions include: (1) Northern California, (2) Northern Sacramento Valley, (3) Greater Sacramento, (4) Bay Area, (5) San Joaquin Valley, (7) Central Coast, (8) Southern California I (Los Angeles and Ventura counties), (9) Southern California II (Orange, Riverside, and San Bernardino counties), and (10) Southern Border Region. Counties within each region are detailed in the corresponding regional report. The Central Sierra (Region 6) does not have any nursing education programs and was, therefore, not included in the analyses.

#### DATA SUMMARY AND HISTORICAL TREND ANALYSES

This analysis presents pre-licensure program data from the 2009-2010 BRN School Survey in comparison with data from previous years of the survey. Data items addressed include the number of nursing programs, enrollments, completions, retention rates, student and faculty census data, the use of clinical simulation by nursing programs, and clinical space and practice restrictions.

#### **Trends in Pre-Licensure Nursing Programs**

## Number of Nursing Programs

There are 5 nursing programs in the Central Coast region that lead to RN licensure. All five of these programs are public ADN programs. There were no new programs in the region in the last year.

**Number of Nursing Programs** 

	Academic Year											
	2000- 2001	2001- 2002	2002- 2003	2003- 2004	2004- 2005	2005- 2006	2006- 2007	2007- 2008	2008- 2009	2009- 2010		
Total # Nursing Programs	5	5	5	5	5	5	5	5	5	5		
ADN Programs	5	5	5	5	5	5	5	5	5	5		
BSN Programs	-	-	-	-	-	-	-	-	-	-		
ELM Programs	-	-	-	-	-	-	-	-	-	-		
Public Programs	5	5	5	5	5	5	5	5	5	5		
Private Programs	-	-	-	-	-	-	-	-	-	-		

#### Admission Spaces and New Student Enrollments

Admission spaces available for new student enrollments increased very slightly in 2009-2010 (n=5), and have remained steady at approximately 250 spaces per year over the past four years. In 2009-2010, these spaces were filled by a total of 239 students, which is a decline of 5.5% (n=14) students over the previous year. This is the first year since 2005-2006 that programs in the region did not overenroll new students.

**Availability and Utilization of Admission Spaces** 

	Academic Year											
	2000- 2001	2001- 2002	2002- 2003	2003- 2004	2004- 2005	2005- 2006	2006- 2007	2007- 2008	2008- 2009	2009- 2010		
Spaces Available	172	198	240	167	182	238	248	248	246	251		
New Student Enrollments	164	192	242	167	181	228	253	251	253	239		
% Spaces Filled	95.3%	97.0%	100.8%	100.0%	99.5%	95.8%	102.0%	101.2%	102.8%	95.2%		

The number of qualified applications to pre-license nursing programs in the Central Coast region declined by 19.2% (n=106) over the previous year. However, there were still many more qualified applications than the region's programs were able to accommodate. 46.3% (n=206) of the qualified applications received were not accepted for admission in 2009-2010.

Applications Accepted and Not Accepted for Admission\*

		Academic Year										
	2000- 2001	2001- 2002	2002- 2003	2003- 2004	2004- 2005	2005- 2006	2006- 2007	2007- 2008	2008- 2009	2009- 2010		
Qualified Applications	232	385	397	335	410	522	413	405	551	445		
Accepted	164	192	242	167	181	228	253	251	253	239		
Not Accepted	68	193	155	168	229	294	160	154	298	206		
% Qualified Applications Not Accepted	29.3%	50.1%	39.0%	50.1%	55.9%	56.3%	38.7%	38.0%	54.1%	46.3%		

<sup>\*</sup>Since these data represent applications rather than individuals, an increase in qualified applications may not represent equal growth in the number of individuals applying to nursing school.

## Student Completions

Student completions among nursing programs in the Central Coast may have reached a plateau in 2009-2010. There were four fewer student completions reported in 2009-2010 compared with the previous year.

**Student Completions** 

		Academic Year									
	2000-	2001-	2002-	2003-	2004-	2005-	2006-	2007-	2008-	2009-	
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	
Student Completions	166	220	186	175	149	145	172	212	239	235	
ADN*	166	220	186	175	149	145	172	212	239	235	

<sup>\*</sup> There are no BSN or ELM programs in the region.

#### Retention Rate

Of the 222 students scheduled to complete a nursing program in the 2009-2010 academic year, 86.9% (n=193) completed the program on-time, 2.7% (n=6) are still enrolled in the program, and 10.4% (n=23) dropped out or were disqualified from the program. The retention rate at 86.9% is an historic high for programs in the region.<sup>2</sup>

**Student Cohort Completion and Retention Data** 

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	Academic Year										
	2000- 2001	2001- 2002	2002- 2003	2003- 2004	2004- 2005	2005- 2006	2006- 2007	2007- 2008	2008- 2009	2009- 2010	
Students Scheduled to Complete the Program	214	293	295	193	226	209	219	247	253	222	
Completed On Time	168	202	182	128	131	160	149	159	168	193	
Still Enrolled	8	36	66	7	19	3	17	62	52	6	
Attrition	38	55	47	58	76	46	53	26	33	23	
Completed Late <sup>‡</sup>										15	
Retention Rate*	78.5%	68.9%	61.7%	66.3%	58.0%	76.6%	68.0%	64.4%	66.4%	86.9%	
Attrition Rate	17.8%	18.8%	15.9%	30.1%	33.6%	22.0%	24.2%	10.5%	13.0%	10.4%	
% Still Enrolled	3.7%	12.3%	22.4%	3.6%	8.4%	1.4%	7.8%	25.1%	20.6%	2.7%	

<sup>\*</sup>Retention rate = (students who completed the program on-time) / (students scheduled to complete the program)

There has been fluctuation in the retention and attrition rates over the ten-year period documented in the above table. There were changes to the survey between 2003-2004 and 2004-2005, and between 2004-2005 and 2005-2006 that may have affected the comparability of these data over time.

#### Student Census Data

The total number of students enrolled in Central Coast nursing programs continued to decline in 2009-2010. Total student enrollment has decreased every year since 2007. On October 15, 2010 there were 384 students enrolled in the region's pre-license nursing programs, which represents a decline of 17.2% (n=80) since October 15, 2007.

#### Student Census Data\*

		Year										
Program Type**	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010		
ADN Program	353	428	382	242	351	432	464	452	433	384		
Total Nursing Students	353	428	382	242	351	432	464	452	433	384		

<sup>\*</sup>Census data represent the number of students on October 15<sup>th</sup> of the given year.

<sup>\*\*</sup>There are no BSN or ELM programs in the region.

<sup>&</sup>lt;sup>2</sup> All programs in the Central Coast region are public ADN programs. Therefore, the retention and attrition rates for the public ADN programs are the same as those for the region as a whole.

<sup>&</sup>lt;sup>‡</sup> Data were collected for the first time in the 2009-2010 survey. These completions are not included in the calculation of either the retention or attrition rates.

## Clinical Simulation in Nursing Education

All five schools (100%) in the Central Coast region with pre-licensure nursing programs reported using clinical simulation<sup>3</sup> in 2009-2010, which represents an increase of one school compared with the previous year. All but one school reported using clinical simulation facilities to standardize clinical experiences, to check clinical competencies and to provide clinical experience not available in a clinical setting. Data also show that 60% (n=3) of the nursing schools that currently use a clinical simulation center have plans to expand it.

Reasons for Using a Clinical Simulation Center*	2007-2008	2008-2009	2009-2010
To standardize clinical experiences	100.0%	100.0%	80.0%
To provide clinical experience not available in a clinical setting	33.3%	50.0%	60.0%
To check clinical competencies	33.3%	100.0%	80.0%
To make up for clinical experiences	0.0%	0.0%	80.0%
To increase capacity in your nursing program	33.3%	0.0%	20.0%
Number of schools that use a clinical simulation center	3	4	5

<sup>\*</sup>These data were collected for the first time in 2006-2007. However, changes in these questions for the 2007-2008 administration of the survey and lack of confidence in the reliability of the 2006-2007 data prevent comparability of the data. Therefore, data from previous years of the survey are not shown.

## Clinical Space & Clinical Practice Restrictions<sup>‡</sup>

The 2009-2010 BRN Annual School Survey included new survey questions that asked all schools in California with pre-licensure nursing programs to report on whether or not their programs had experienced challenges related to clinical space access or clinical practice restrictions. None of the five programs in the Central Coast reported being denied access to clinical placement sites, or that students in their programs had encountered restrictions to clinical practice imposed on them by clinical facilities.

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<sup>&</sup>lt;sup>3</sup> Clinical Simulation Center/Experience - students have a simulated real-time nursing care experience using hi-fidelity mannequins and clinical scenarios, which allow them to integrate, apply, and refine specific skills and abilities that are based on theoretical concepts and scientific knowledge. The experience includes videotaping, de-briefing and dialogue as part of the learning process.

<sup>&</sup>lt;sup>‡</sup> Data were collected for the first time in the 2009-2010 survey.

## Faculty Census Data

The total number of nursing faculty in the Central Coast region in 2009-2010 increased by one faculty member compared with the previous year. Of the full-time and part-time faculty reported, 58.4% (n=45) were full-time and 41.6% (n=32) were part-time. The 45 full-time faculty members is the highest number of full-time faculty reported in the past decade.

On October 15, 2010, there were two vacant faculty positions. These vacancies represent a 2.5% faculty vacancy rate, the lowest vacancy rate on record.

## Faculty Census Data<sup>1</sup>

	Year										
	2001	2002	2003	2004	2005* <sup>2</sup>	2006*	2007*	2008	2009*	2010	
Total Faculty	58	66	47	41	49	64	58	70	76	77	
Full-time	32	32	35	28	29	38	40	40	29	45	
Part-time	26	34	12	13	10	26	18	30	35	32	
Vacancy Rate**		8.3%	6.0%	16.3%	3.9%	11.1%	14.7%	2.8%	2.6%	2.5%	
Vacancies		6	3	8	2	8	10	2	2	2	

<sup>\*</sup> The sum of full- and part-time faculty did not equal the total faculty reported in these years.

## Summary

Over the past decade, the number of admission spaces available in pre-licensure nursing education programs in the Central Coast region has increased by 45.9% (n=79). New student enrollments in these programs also increased, but in recent years enrollment growth has slowed. As the number of schools has remained the same during this period, program expansion may have reached a limit. Despite the slowing growth of available space and enrollments, nursing programs in the region continue to receive more qualified applications than can be accommodated.

The plateau in new student enrollments now shows signs of impacting the number of graduates from nursing programs in the Central Coast region. For the first time in four years, the number of students completing a nursing program in the region declined.

All of the schools in the Central Coast region reported using clinical simulation. No schools in the region reported being denied access to clinical placement sites, or that students in their programs had encountered restrictions to clinical practice imposed on them by clinical facilities.

Expansion in nursing education has required nursing programs to hire more faculty. As a result, Central Coast nursing programs have reported a 32.8% (n=19) increase in the number of faculty over the past decade. While the total number of faculty has fluctuated over the past ten years, the number of full-time faculty reported in 2010 was the highest number on record. The 2.5% faculty vacancy rate (n=2) reported also represents the lowest vacancy rate to date.

<sup>\*\*</sup>Vacancy rate = number of vacancies/(total faculty + number of vacancies)

<sup>1 -</sup> Census data represent the number of faculty on October 15<sup>th</sup> of the given year.

<sup>2 -</sup> Faculty vacancies were estimated based on the vacant FTEs reported.

## **APPENDIX A – Central Coast Nursing Education Programs**

## **ADN Programs**

Allan Hancock College Cuesta College Hartnell College Monterey Peninsula College Santa Barbara City College

## **APPENDIX B – BRN Education Advisory Committee Members**

## **BRN Education Advisory Committee Members**

<u>Members</u> <u>Organization</u>

Loucine Huckabay, Chair California State University, Long Beach

Sue Albert College of the Canyons
Audrey Berman Samuel Merritt University
Liz Close Sonoma State University
Patricia Girczyc College of the Redwoods
Marilyn Herrmann Loma Linda University

Deloras Jones California Institute of Nursing and Health Care

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